

REMARKS

Claims 1-3, 5, and 9 stand rejected by the Examiner. Claims 4, 6-8, and 10-19 stand objected to by the Examiner, who indicates that these claims would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims. Applicant thanks the examiner for this indication of allowability and presents the below amendment to the Claims.

AMENDMENT TO THE CLAIMS

Please cancel claims 1-19 without prejudice and enter new claims 27-40 for examination. A complete listing of claims begins on the next full page.

Original Claim 4 is re-written in independent form and presented as claim 27.

Original Claim 6 is re-written in independent form and presented as claim 28. Claims 7-8 originally depended on claim 6, and are presented as claims 29-30 to preserve the dependent relationship.

Original Claim 10 is re-written in independent form and presented as claim 31. Claims 11-13 originally depended on claim 10, and are presented as claims 32-34 to preserve the dependent relationship.

Original Claim 14 is re-written in independent form and presented as claim 35. Claims 15-19 originally depended on claim 14, and are presented as claims 36-40 to preserve the dependent relationship.

Claims:

1-19. (Cancelled).

20-26. (Cancelled).

27. (New) A semiconductor die stack comprising:

at least two semiconductor dies vertically stacked upon each other, each semiconductor die defines opposed top and bottom surfaces and opposed pairs of longitudinal and lateral side surfaces;

leads which extend out from at least one of the side surfaces of each of the semiconductor dies, the leads define first end portions, middle portions, second end portions, first junctions and second junctions, the second junctions of the leads of the upper semiconductor die are electrically connected to respective ones of the first junctions of the leads of the lower semiconductor die, the first and second junctions of the leads of the upper and lower semiconductor dies are bent in opposing directions;

the middle portions of the leads of the upper semiconductor die being electrically connected to respective ones of the first junctions of the leads of the lower semiconductor die;

the first junctions of the leads of the upper and lower semiconductor dies having a bend radii, bend distances, and bend angles, the bend radii, bend distances and bend angles of the first junctions of the leads of the upper and lower semiconductor dies being equal to each other; and

the second junctions of the leads of the upper semiconductor die have a flared ski tip configuration.

28. (New) A semiconductor die stack comprising:

at least two semiconductor dies vertically stacked upon each other, each semiconductor die defines opposed top and bottom surfaces and opposed pairs of longitudinal and lateral side surfaces;

leads which extend out from at least one of the side surfaces of each of the semiconductor dies, the leads define first end portions, middle portions, second end portions, first junctions and second junctions, the second junctions of the leads of the upper semiconductor die are electrically connected to respective ones of the first junctions of the leads of the lower semiconductor die, the first and second junctions of the leads of the upper and lower semiconductor dies are bent in opposing directions,

the first junctions of the leads of the upper semiconductor die being electrically connected to respective ones of the middle portions of the leads of the lower semiconductor die;

bend distances of the first junctions of the leads of the upper semiconductor die being greater than the bend distances of the first junctions of the leads of the lower semiconductor die.

29. (New) The semiconductor die stack of Claim 28 wherein the difference between the bend distances of the first junctions of the leads of the upper and lower semiconductor dies is at least a width of the leads of the lower semiconductor die.

30. (New) The semiconductor die stack of Claim 29 wherein the second junctions of the leads of the upper semiconductor die have a flared ski tip configuration.

31. (New) A semiconductor die stack comprising:

at least two semiconductor dies vertically stacked upon each other, each semiconductor die defines opposed top and bottom surfaces and opposed pairs of longitudinal and lateral side surfaces;

leads which extend out from at least one of the side surfaces of each of the semiconductor dies, the leads define first end portions, middle portions, second end portions, first junctions and second junctions, the second junctions of the leads of the upper semiconductor die are electrically connected to respective ones of the first junctions of the leads of the lower semiconductor die, the first and second junctions of the leads of the upper and lower semiconductor dies are bent in opposing directions; and

at least one narrow jumper strip electrically connected to adjacent leads of at least one of the semiconductor dies.

32. (New) The semiconductor die stack of Claim 31 wherein the narrow jumper strip(s) is electrically connected to the middle portions of the adjacent leads.

33. (New) The semiconductor die stack of Claim 32 wherein the narrow jumper strip has a cross sectional area along its length equal to a cross sectional area along the height of the leads to which the narrow jumper strips are attached.

34. (New) The semiconductor die stack of Claim 33 wherein the narrow jumper strip(s) may be fabricated from the same material as the leads of the semiconductor die.

35. (New) A semiconductor die stack comprising:

at least two semiconductor dies vertically stacked upon each other, each semiconductor die defines opposed top and bottom surfaces and opposed pairs of longitudinal and lateral side surfaces;

leads which extend out from at least one of the side surfaces of each of the semiconductor dies, the leads define first end portions, middle portions, second end portions, first junctions and second junctions, the second junctions of the leads of the upper semiconductor die are electrically connected to respective ones of the first junctions of the leads of the lower semiconductor die, the first and second junctions of the leads of the upper and lower semiconductor dies are bent in opposing directions; and

at least one wide jumper strip electrically connected to at least two leads of at least one of the semiconductor dies, the at least two leads which are electrically connected to the wide jumper strip have at least one interposed lead there between.

36. (New) The semiconductor die stack of Claim 35 wherein the wide jumper strip has a C shaped configuration.

37. (New) The semiconductor die stack of Claim 36 further comprising dielectric between the wide jumper strip and the interposed lead(s).

38. (New) The semiconductor die stack of Claim 37 wherein the wide jumper strip is electrically connected to the middle portions of the leads.

39. (New) The semiconductor die stack of Claim 38 wherein the wide jumper strip has a cross sectional area along its length equal to a cross sectional area along a height of the leads to which the wide jumper strip is attached.

40. (New) The semiconductor die stack of Claim 39 wherein the wide jumper strip may be fabricated from the same material as the leads of the semiconductor die.

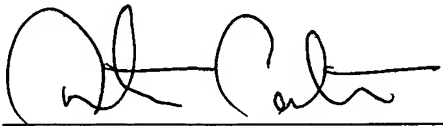
CONCLUSION

Applicant respectfully submits that the claims as presented are allowable, as indicated previously by the examiner. Applicant requests that notice of allowance be issued.

Respectfully submitted,

ANDREWS & KURTH, L.L.P.

Date: 9/29/04

By: 

Nathan H. Calvert
Registration No. 48,990
111 Congress Avenue
Suite 1700
Austin, Texas 78701
Telephone: (512) 320-9200
Facsimile: (512) 320-9292